

Remarks

Applicant thanks the Examiner for his careful consideration of the application.

Claims 1 - 32 are pending in the application.

Election/Restrictions

Applicant notes that the Examiner has made his restriction final. The Examiner acknowledged Applicant's election with traverse species 5 (fig. 4) in the reply filed on 11/03/2006 is acknowledged. The Examiner did not find the traversal to be persuasive because the Examiner asserts that each embodiment is different in structure and operation. The Examiner concluded a different search has to be made for each embodiment, which requires more and effort.

Claims 8, 9, 17-20, and 27-32 stand withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no currently allowable generic or linking claims.

Drawings

The drawings are objected to because in figure 4, the spring (21) appears to be in the wrong side of the plate (14) because it would be impossible for the spring to provide any tensioning on the belt. Applicant submits a corrected replacement Figure 4 drawing sheet.

Specification

The Examiner objected to the disclosure because of the following informalities: In page 2, the brief description of each embodiment is confusing because it is unclear as to which embodiments is each paragraph referring too. First, Applicant notes that Figures 5 and 6 are not embodiments per se, but abstract demonstrations of the present invention. However, Applicant has made the amendments suggested by the Examiner.

Claims Objections

Claim 3 is objected to because of the following informalities: in line 5, "of" should be inserted subsequent to "frame". Applicant has amended claim 3 to overcome this objection.

Claim Rejections – 35 USC § 112

Claim 5 is rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In lines 1 and 2, respectively, "the motor plate" and "the driven pulley" lack antecedent basis. Applicant has amended claim 5 to overcome this rejection.

Claim Rejections - 35 USC § 102

Claims 1 – 7, 10 – 16, and 21 – 26 are rejected under 35 USC § 102(b) as being anticipated by Hutchison (US Patent No. 1,615,544) ("Hutchison"). These rejections are respectfully traversed.

Claims 2, 11, and 22 have been canceled.

Applicant has amended claims 1, 10, and 21 to more precisely recite Applicant's intended claim scope. Applicant believes it is well-known that as torque is applied to a pulley, there will be a proportional variation in the tension of each of the 2 belt strands. One belt-strand will get proportionately tighter, and the other belt-strand will get proportionately looser.

In typical belt drives, however, these effects are equal and opposite -- the tension increase in one belt-strand exactly equals the tension decrease in the other belt-strand, and the "average" belt strand tension remains the same. An advantage of the present design is that when torque is applied, the "average" belt strand tension does not stay the same. By carefully choosing the pivot location, one can dictate and exploit how the average belt tension changes when torque is applied. This behavior is well suited in bidirectional drive applications, where greater torque (ie average belt strand tension) is required in one direction than the other. For example, we can design the average belt strand tension to increase with

clockwise torque (which yields increased drive-torque-capacity), and decrease with counterclockwise torque (which will extend belt life), or vice versa.

Therefore, Applicant believes claims 1, 10, and 21 are now allowable over the cited art.

Claims 3 – 7, 12 – 16, and 23 – 26, should be allowable if claims 1, 10, and 21 are allowable, as claims 3 – 7 depend from claim 1, claims 12 – 16 depend from claim 10, and claims 23 – 26 depend from claim 21.

Conclusion

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

A telephone interview is respectfully requested at the number listed below prior to any further Office Action, i.e., if the Examiner has any remaining questions or issues to address after this paper. The undersigned will be happy to discuss any further Examiner-proposed amendments as may be appropriate.

Respectfully submitted,

Joseph M. Young
Attorney for Applicants
Registration No. 45,248
Telephone (503) 685-4229

JMY/rjh